

Application No. 09/831,327
Response Under 37 CFR 1.116
Expedited Procedure
Examining Group 1775
Paper dated August 6, 2003
Reply to Office Action of April 9, 2003
Attorney Docket No. 1217-010737

REMARKS/ARGUMENTS

In the specification, amendments have been made to correct minor translational and grammatical errors. No new matter has been added.

35 U.S.C. §§ 102 & 103 Rejections

Claims 1, 4, 6-16, 18-19, 21-22, 24-57, and 60-78 stand rejected under 35 U.S.C. § 102(e) as being anticipated by United States Patent No. 5,985,469 to Kurakata et al. (hereinafter “Kurakata”).

The Examiner states that Kurakata “discloses the claimed steel surface hardened and with a layer of the claimed carbide and over layer made by the claimed process.” However, there are clear differences between the present invention and what is disclosed in Kurakata. For example:

1.) The Forming Process: The white decorative part disclosed in Kurakata has a layered structure including a substrate, a white hard coating, and an outermost coating. Between the substrate and the white hard coating, a metal coating is disposed. In the present invention, the decorative item has a structure that includes a stainless steel base and a hard coating. The surface of the base material itself is carburized to an arbitrary depth from the surface of the base material where the carbon is diffused so as to form a solid solution in which crystalline chromium carbide is not formed, thereby forming a carburized hardened layer.

2.) The Location: The undercoating disclosed in Kurakata is layered on the substrate surface. In the present invention, the carburized hardened layer of the invention is formed as an internal part of the base material surface to an arbitrary depth as shown in the figures in the specification.

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3.) The Composition: The undercoating disclosed in Kurakata is selected from a Ni coating, a Ni alloy coating, a Cr coating, a Pd coating, a laminate of Ni alloy and Cr coatings, a laminate of Ni and Cr coatings, a laminate of Ni alloy and Pd coatings, a laminate of Ni and Pd coatings, a Cu-Sn alloy coating, and Cu-Sn-Pd alloy coatings. The undercoating is formed on the substrate according to a wet plating process (see column 4, lines 14-31 of Kurakata). In the present invention, the carburized layer of the invention includes the same elements of the stainless steel base, such as Fe-Cr-Ni-Mo or Fe-Cr-Mn, and carbon in the form of a solid solution.

In conclusion, the white decorative part disclosed by Kurakata and the decorative item of the present invention have completely different structures when compared to each other. Kurakata does not in any way anticipate or suggest the present invention. Therefore, the rejection of claims 1, 4, 6-16, 18-19, 21-22, 24-57, and 60-78 under 35 U.S.C. § 102(e) should be withdrawn.

Claims 1, 4, 6-15, 19, 21-22, 24-28, 38-44, 61-63, and 70-78 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Japanese Patent No. 51059732 to Suwa (hereinafter “Suwa”) or Japanese Patent No. 56008004 to Glory KK (hereinafter “Glory KK”) or Japanese Patent No. 62199765 to Daido Tokushuko KK (hereinafter “Daido Tokushuko KK”). Also, claims 16, 18, 29-37, 45-57, 60, and 64-69 stand rejected under 35 U.S.C. § 103(a) as being obvious over Suwa or Glory KK or Daido Tokushuko KK in view of JP09071854 or United States Patent Nos. 5,792,282 or 5,593,510 or 5,556,483 to Daido Hoxan Inc. (hereinafter “Daido Hoxan”).

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Daido Tokushuko KK discloses a material for high surface pressure structural parts by successfully subjecting a steel material containing specific ratios of C, Si, Mn, Al, N, and Fe (claim 1); C, Si, Mn, Al, N, Ni ($\leq 5.0\%$), Cr ($\leq 5.0\%$), Mo, and Fe (claim 2); C, Si, Mn, Al, N, Ni ($\leq 5.0\%$), Cr ($\leq 5.0\%$), Mo ($\leq 0.8\%$), V, Ti, Nb, Zr, and Fe (claim 3) to a carburization treatment and chemical vapor deposition treatment to form a hard layer. In fact, the steel material is carburized before forming a TiC or a tin hard layer. However, the steel material of Daido Tokushuko KK and the stainless steel base material of the invention are completely different regarding the amount of and the specific elements contained therein.

Additionally, the materials in Daido Tokushuko KK are used as machine structural parts for large gears, etc. The present invention is directed to articles, which are small in size, such as decorative items on the exterior part of a timepiece, wristwatch bands, bezels, casings, back lids or dials, etc. Thus, the material of Daido Tokushuko KK and the decorative item of the invention are completely different from each other with respect to their structure and their respective fields of application.

Further, as was explained in the Amendment dated January 8, 2003, none of Suwa, Seikosha, Glory KK, and/or Daido Tokushuko KK disclose or suggest a carburized hardened layer in which crystalline chromium carbide is not formed, or a hard coating disposed over the carburized hardened layer, where the hard coating has a surface hardness greater than that of the carburized layer.

The Examiner indicates that Suwa or Glory KK or Daido Tokushuko KK discloses the claimed steel surface hardened and with a layer of the claimed carbide and over the layer made by the claimed process. The hardness relationship between the hard coating and

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carburized layer is not an inherent property. Various combinations can be considered when including one of the various base materials and one of the various hard coatings. However, it cannot be said that all combinations satisfy a desired hardness relationship that the hard coating has a surface hardness greater than that of the carburized layer as claimed.

Applicants sought to provide a decorative item, which has a high surface hardness, i.e., greater scratch resistance than that of conventional decorative items, while maintaining corrosion resistance, an inherent property of stainless steel. Applicants achieved this aim by providing a carburized hardened layer extending from a surface of a base material to an arbitrary depth where carbon is diffused so as to form a solid solution in which crystalline chromium carbide is not formed. Additionally, at least one hard coating is disposed on a surface of the hardened carburized layer of the base material where the hard coating has a surface hardness greater than that of the carburized layer.

None of the cited references discloses all of the limitations recited in the present claims. The presumption that a claimed product may be within the broad field of the prior art and one may arrive at it by selecting specific combinations does not render the product obvious in the absence of some directions or reasons for making such a selection. *Ex parte Levengood*, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993); *Al-Site Corp. v. VSI Int'l Inc.*, 174 F3d 1308, 50 U.S.P.Q.2d 1161 (Fed. Cir. 1999) (The level of skill in the art cannot be relied upon to provide the suggestion to combine references).

Moreover, the assertion that the hardness relationship between the hard coating and the carburized layer would be inherent in the products of the prior art is clearly erroneous and does not overcome the deficiency of the cited references. The fact that a prior art reference may

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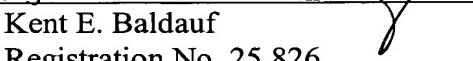
inherently (and in this case it does not) have the characteristics of the claimed product is not sufficient to create the presumption of anticipation or obviousness, which proves conclusively that the 102 (b) and 103(a) rejections should be withdrawn. The present invention clearly is not anticipated by Suwa, Glory KK, or Daido Tokushuko KK. Also the present invention is not obvious over any of Suwa or Glory KK or Daido Tokushuko KK in view of Daido Hoxan taken alone or in any combination. Therefore, the rejections under 35 U.S.C. §§ 102(b) and 103 (a) should be withdrawn. Applicants assert that claims 1, 4, 6-16, 18-19, 21-22, 24-57, and 60-78 are in form for allowance.

In view of the above amendments and remarks, reconsideration of the rejections and allowance of claims 1, 4, 6-16, 18, 19, 21, 22, 24-57 and 60-78 are respectfully requested.

Respectfully submitted,

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